

<110> GENOMINE INC.
KOREA RESEARCH INSTITUTE OF CHEMICAL TECHNOLOGY

<120> Polypeptide Participating in Pyridoxine Biosynthesis, a
Polynucleotide Coding the Polypeptide and Those Uses

<150> KR 10-2004-0011517
<151> 2004-02-20

<160> 6

<170> KopatentIn 1.71

<210> 1
<211> 1297
<212> DNA
<213> Arabidopsis thaliana

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| cggcgttggt gcggtgtacg gtaacgggtc gataacggag gccaagaaat ctcccttctc | 180 |
| cgtgaaggtc ggtttggctc agatgctccg tgggtggttt atcatggatg tcgtcaacgc | 240 |
| cgagcaagct cgtatcgccg aggaggctgg tgcttgcgcc gtcattggctt tggagcgtgt | 300 |
| tcctgctgat atccgcgctc aaggaggcgt cgctcgtatg agcgatccac aaatgattaa | 360 |

| | |
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| agaaatcaaa caagccgita cgattccggt gatggctaag gctaggattg gtcatttcgt | 420 |
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| tcttgctgat gaagatcatc acatcaacaa gcataatttc cggatcccg tctgttgagg | 540 |
| ttgccggaat ctggcgagg ctctgaggag gatccgtgaa ggtcgggcga tgattaggac | 600 |
| caaaggtgaa gctggaaccg gtaacattat tgaagctgtg aggcattgtg ggtctgttaa | 660 |
| tggtagacatt agggttttgc gaaacatgga tgatgatgag gttttcactt tcgctaagaa | 720 |
| attagccgct ccgtacgac tcgtgatgca gactaagcag cttggtcgtc ttctgtagt | 780 |
| ccaattcgcc gccggtggag tggctactcc ggctgatgca gctctcatga tgcagcttgg | 840 |
| atgtgatggt gtctttgttg gttctggtat cttcaagagc ggtgaccag ctgctcgtgc | 900 |
| acgtgccatt gttcaggctg tgactcatta cagtgacct gagatgcttg tggaggtag | 960 |
| ctgtgggctt ggagaagcca tggttgggat caatctcaac gatgagaagg ttgagaggtt | 1020 |
| cgctaatcgc tccgagtgat caaagaaata aaaggtaaaa tatctcagac gaaatggttt | 1080 |
| cagaattttc tcagaccatt ttgcagtaat ctctttgaaa agaagaagat gatgatattg | 1140 |
| ttggtagttt gtatcctttg tgttttccit ataatctttg atagtctttt gttattgtaa | 1200 |
| ctcgtaatcc ctttgcaaga acaagtttgt cagttataat aatgtactac tctcttgatc | 1260 |

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1297

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<213> Arabidopsis thaliana

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Leu Arg Gly Gly Val Ile Met Asp Val Val Asn Ala Glu Gln Ala Arg
35 40 45

Ile Ala Glu Glu Ala Gly Ala Cys Ala Val Met Ala Leu Glu Arg Val
50 55 60

Pro Ala Asp Ile Arg Ala Gln Gly Gly Val Ala Arg Met Ser Asp Pro
65 70 75 80

Gln Met Ile Lys Glu Ile Lys Gln Ala Val Thr Ile Pro Val Met Ala
85 90 95

Lys Ala Arg Ile Gly His Phe Val Glu Ala Gln Ile Leu Glu Ala Ile
100 105 110

Gly Ile Asp Tyr Ile Asp Glu Ser Glu Val Leu Thr Leu Ala Asp Glu
115 120 125

Asp His His Ile Asn Lys His Asn Phe Arg Ile Pro Phe Val Cys Gly
130 135 140

Cys Arg Asn Leu Gly Glu Ala Leu Arg Arg Ile Arg Glu Gly Ala Ala
145 150 155 160

Met Ile Arg Thr Lys Gly Glu Ala Gly Thr Gly Asn Ile Ile Glu Ala
165 170 175

Val Arg His Val Arg Ser Val Asn Gly Asp Ile Arg Val Leu Arg Asn
180 185 190

Met Asp Asp Asp Glu Val Phe Thr Phe Ala Lys Lys Leu Ala Ala Pro
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Tyr Asp Leu Val Met Gln Thr Lys Gln Leu Gly Arg Leu Pro Val Val
210 215 220

Gln Phe Ala Ala Gly Gly Val Ala Thr Pro Ala Asp Ala Ala Leu Met
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Met Gln Leu Gly Cys Asp Gly Val Phe Val Gly Ser Gly Ile Phe Lys
245 250 255

Ser Gly Asp Pro Ala Arg Arg Ala Arg Ala Ile Val Gln Ala Val Thr
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His Tyr Ser Asp Pro Glu Met Leu Val Glu Val Ser Cys Gly Leu Gly
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Ala Asn Arg Ser Glu
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